

In the Claims

Please amend claims 22 and 87 as follows:

22. (Five Times Amended) A method for detecting a specific living target cell in a cell suspension of a mixed cell population, in a fluid system containing a mixed cell population, or in a cell suspension prepared from a solid tissue, with the exception of normal and malignant hematopoietic cells in blood and bone marrow, the method comprising the steps of:
- a. coating paramagnetic particles or beads with a first antibody or antibody fragment directed against a second antibody or antibody fragment;
  - b. incubating the second antibody or antibody fragment with the cell suspension to bind the second antibody or antibody fragment with the target cell, thereby creating a cell mixture, wherein the second antibody or antibody fragment is directed against a membrane structure specifically expressed on the target cell and not on a non-target cell in the cell mixture;
  - c. washing the cell mixture to remove unbound second antibody or antibody fragment;
  - d. mixing the coated paramagnetic particles or beads with the washed cell mixture;
  - e. incubating the washed cell mixture and the coated paramagnetic particles under gentle rotation at about 4°C until target cell-bead rosettes are formed; and
  - f. visually detecting the target cell-bead rosettes after incubation;
- wherein the target cells are living and can be detected at a sensitivity of one target cell per 100 or more total cells.

87. (Four Times Amended) A method for detecting living tumor cells in a cell suspension of mixed cell population or in a cell suspension prepared from a solid tissue, with the exception of normal and malignant hematopoietic cells in blood and bone marrow, comprising:

- a) coating paramagnetic particles with a first antibody or fragment directed against a second tumor-specific monoclonal antibody or fragment;

- b) incubating the second tumor specific antibody or antibody fragment with the cell suspension to allow the second tumor specific antibody or antibody fragment to bind the tumor cells;
- c) washing the cell suspension to remove unbound second antibody or antibody fragment;
- d) mixing the coated paramagnetic particles with the cell suspension;
- e) incubating the mixture at about 4°C under gentle rotation until tumor cell-bead rosettes are formed; and
- f) visually detecting the tumor cell-bead rosettes;  
wherein the target cells are living and can be detected at a sensitivity of one target cell per 100 or more total cells.